The USAID FEWS-NET

Africa Weather Hazards Assessment

for

May 12 - 18, 2005

Weekly Introduction:

Update of El Niño:

Synopsis: ENSO-neutral conditions are expected to prevail during the northern summer (June-August), in spite of recent increases in SST anomalies. Surface and subsurface water temperatures increased substantially in the eastern equatorial Pacific during April. Sea surface temperature (SST) anomalies increased by more than 2°C in the extreme eastern equatorial Pacific during April and by the end of the month, positive equatorial SST anomalies greater than +0.5°C (~0.9°F) were observed in most areas from Indonesia eastward to the South American coast. The increase in SST anomalies in the eastern equatorial Pacific during April was reflected by an increase in the SST anomalies in the Niño 3 and Niño 1+2 regions and by an increase in the upper-ocean heat content in the eastern half of the equatorial Pacific. Subsurface cooling and a decrease in upper-ocean heat content have been evident in the central equatorial Pacific. This cooling is expected to propagate eastward, reaching the eastern equatorial Pacific during May. Thus, the effects of the warming along the west coast of South America should be brief. Strong week-to-week variability in the patterns of tropical atmospheric circulation and precipitation is likely during May. A majority of the statistical and coupled model forecasts indicate that ENSO-neutral conditions will prevail during the northern summer (June-August). The spread in the forecasts indicates increasing uncertainty during the last half of 2005.

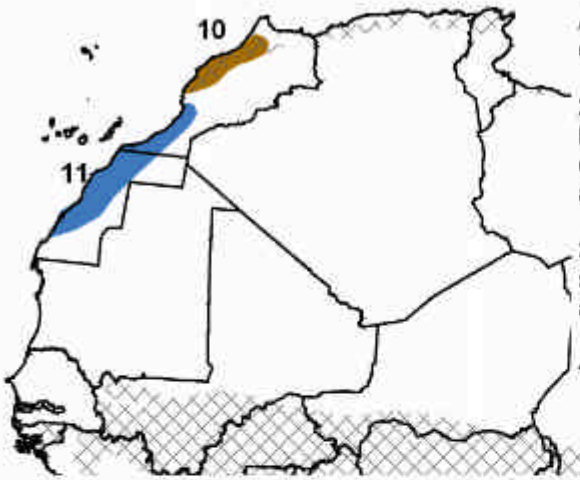
This discussion is a consolidated effort of NOAA and its funded institutions.

NOAA/CPC **USGS**

Weather Hazards Assessment Graphic:

Africa Weather Hazards Assessment

NOTE: Black hatched regions depict combined wheat, maize, sorghum, and millet crop zones which are active (sowing to harvest) during the current month. (from FAO)



1. Drought continued over most of the pastoral areas of Africa's Greater Horn; however recent beneficial rains have eased dryness and improved pasture conditions.

2. An untimely dry spell in late March and early April stressed Belg and Long Cycle crops, and even resulted in some Belg crop failures. Recent heavy rains have raised crop prospects and resulted in some crop damage.

3. An early end to the 2004 rainy season exacerbated water shortages and pasture degradation in central Darfur, as well as neighboring parts of eastern Chad.

4. Water levels remain low on Lake Victoria despite recent rains.

5. Long term drought continues in interior Western Cape.

6. Severe drought continues across southern Malawi, much of Mozambique, as well as eastern and southern Zimbabwe.

7. An untimely dry spell may have reduced final crop yields over much of central Zimbabwe, southern Zambia and the surrounding area.

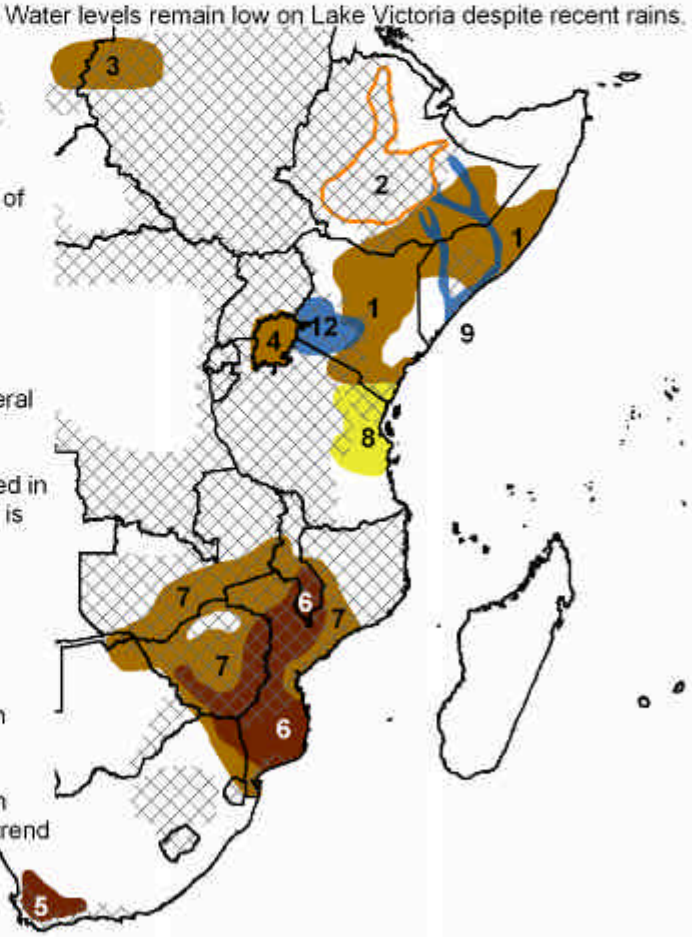
8. Rainfall has been lighter than normal during the past several weeks across northeastern Tanzania, stressing crops.

9. Recent heavy rains in the Ethiopian Highlands has resulted in deadly floods along the Shebelle River in Ethiopia. Flooding is expected to continue.

10. Dry weather worsened prospects for winter grains in western Morocco.

11. An unusual Atlantic storm produced heavy rains across Western Sahara and southwestern Morocco. The heavy rain may have triggered flooding.

12. Torrential rains have resulted in flooding in southwestern Kenya. Flooding is expected to continue; however a drying trend later in the period should allow the situation to improve.



Valid: May 12 - 18, 2005

Weather Hazards Text Explanation:

1. The March through May rains during 2005 have been lighter than normal across large portions of southeastern Ethiopia, central Somalia and eastern Kenya despite the recent torrential rains which fell in nearby areas. Rainfall since March 1 ranges from 30 to 70 percent of normal, with deficits ranging from 50 to over 150 mm. During April 2005, rainfall amounts were less than half of normal across southern and eastern portions of Ethiopia's Somali region while the Shebelle River burst its banks due to heavy rains in the nearby highlands. Recent showers favored pastures and helped to boost water supplies across southeastern Ethiopia and Somalia, while dry conditions prevailed across much of eastern Kenya. During the assessment period, additional showers are expected across southeastern Ethiopia and Somalia, while dry weather is expected to continue across eastern Kenya.

2. In the Belg production areas of the Ethiopian Highlands, the seasonal rains started strong during early March. However, the rains halted suddenly during late March with the dry spell lasting 3 weeks into early April. The dry spell negatively affected Belg crops and Long Cycle sowing activities. Some Belg crops may have been pushed beyond the permanent wilting point. Rainfall resumed on or around April 17 and has been continuing since, especially in Oromiya and SNNPR. Rain is expected to continue falling during the next few weeks, however rainfall should be lighter over eastern Oromiya than recent weeks. The recent abundant rains and the expected rains should increase prospects for Belg crops that are not beyond the permanent wilting point. The rain will also favor Long Cycle crop sowing and establishment, improve pasture conditions and increase water supplies.

3. The 2004 wet season was drier than normal and ended early across much of central Darfur, as well as the Biltine and Ouaddai Prefectures in eastern Chad. This led to moisture shortfalls which in turn reduced viable pasture and water supplies in the area. Although the poor rains of 2004 were not unusual for this arid region, the dryness will exacerbate the ongoing humanitarian crisis. Seasonal rains have begun their northward advance, with rain reaching into South Darfur, extreme southern portions of West Darfur and southern parts of Ouaddai. Rains should briefly retreat southward this week, with seasonably hot, dry conditions expected across the hazards region.

4. April and early May rains have helped to raise Lake Victoria's water levels. However, lake levels remain near their lowest levels in at least 10 years. The low water level has reduced flow into the Nile River and has resulted in reduced hydroelectric power generation and caused energy shortages in parts of Uganda.

5. In interior Western Cape, South Africa, only 25% to 60% of normal rainfall occurred from April to September of 2004. In many areas, the poor performance of the 2004 rains was in addition to lighter than normal rains in 2003. The extended drought has caused major drinking and irrigation water shortages, stressed pastures and has had a negative effect on dry land farming across interior parts of the province. Recent rains have resulted in some improvement. The passage of a few cold fronts during the assessment period will produce some rainfall across the region.

6. Rainfall totals are well below normal for the 2004-05 season in central and southern Mozambique, eastern and southern Zimbabwe, southern Malawi and the northeastern-most corner of South Africa. Rainfall totals are between 30 and 60 percent of normal across the region, with deficits of 200 to 600 mm. The driest areas are in Gaza and Inhambane provinces in Mozambique, as well as Manicaland and Masvingo provinces in Zimbabwe. Across these areas, rainfall was much lighter than normal during February and early March. As a result, there is a likelihood of crop failures in these areas. In addition, the drought will likely result in a reduction of viable pasture, water shortages and low river levels. The dry season has begun, therefore the chance for any relief during the next several months is nil.

7. A lack of rainfall during February and March has resulted in an untimely dry spell across much of Zimbabwe, central Mozambique, southern Malawi, southern Zambia and northeastern Namibia. The dry spell, which resulted in 4 to 8 weeks of little to no rainfall, came during a critical stage of crop development. In many areas, the dryness was accompanied by hot temperatures. As a result, reductions in crop yield and crop quality are likely in these areas. Many parts of this area have received 60 to 75% of the normal January-March rainfall total. The effects of this dry spell may be enhanced by a late start of the rainy season in some locations. Portions of northern Zimbabwe are not experiencing moisture stress and problems with dryness. Timely rains during late February into March have resulted in good cropping conditions in orographically favored portions of Midlands and Mashonaland in Zimbabwe. Dry conditions are expected across the region, as the dry season has set in and ended the 2004-05 growing season.

8. Rainfall during the month of April and first week of May was much lighter than normal across northeastern Tanzania and extreme southeastern Kenya. Rainfall amounts are between 20 and 40 percent of normal. The dryness stressed main season crops across the region. Near the coast, rainfall is expected to be on the increase during the period which would favor main season crops and ease dryness. Further inland, however, prospects for rain are low and dry weather is expected to continue.

9. Deadly flooding along the Shebelle has claimed more lives that the 2003 floods in Ethiopia's Somali Region. Continued rainfall over the Ethiopian Highlands and across the Somali Region will continue flooding along the Shebelle during the period. However, river levels should begin to gradually recede. Flooding is likely downstream in Somalia as well. Flooding is expected along the Jubba River in Ethiopia and Somalia during the period.

10. Little rainfall across western Morocco over the past two months has reduced yield prospects for maturing winter grains. Dry weather is expected across the region, with mainly seasonable temperatures.

11. An unusual Atlantic storm system produced heavy rains across Western Sahara and portions of southwestern Morocco on Tuesday the 10th into Wednesday the 11th. These heavy rains may have triggered localized flooding. Dry weather is expected to return to the area during the assessment period.

12. Heavy rains during the past week have resulted in numerous flooding problems throughout southwestern Kenya. Locally heavy rains early in the assessment period may result in additional flooding; however rain should become lighter late in the period. This should ease the flood threat.

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Questions or comments about this product may be directed to Alvin.Miller@noaa.gov or 1-301-763-8000 x7552